IMMUNOLOGY

CONTENTS

Vol. 65 No. 1 September 1988

Review paper

S. L. KING. An assessment of phosphoinositide hydrolysis in antigenic signal transduction in lymphocytes 1

A. RANDRUP THOMSEN & O. MARKER: The complementary roles of cellular and humoral immunity in resistance to re-infection with LCM virus 9

P. M. KAYE, N. K. PATEL & J. M. BLACKWELL: Acquisition of cell-mediated immunity to *Leishmania*. II. *LSH* gene regulation of accessory cell function 17

Y. MATSUMOTO & M. FUJIWARA: Adoptively transferred experimental allergic encephalomyelitis in chimeric rats: identification of transferred cells in the lesions of the central nervous system 23

T. W. VAN DEN AKKER, E. DE GLOPPER-VAN DER VEER, J. RADL & R. BENNER: The influence of genetic factors associated with the immunoglobulin heavy chain locus on the development of benign monoclonal gammapathy in ageing Igh-congenic mice 31

G. J. W. J. ZIGTERMAN, M. JANSZE, H. SNIPPE & J. M. N. WILLERS: Stimulation of liposome-induced humoral immune responses by non-ionic block polymer surfactants in Xid mice 37

I. H. MIRZA & T. J. WILKIN: Antigenicity of the carboxyl terminus of insulin: isolation of human insulin-specific monoclonal antibodies 43

S. A. WILLIAMSON, R. A. KNIGHT, S. L. LIGHTMAN & J. R. HOBBS: Effects of beta endorphin on specific immune responses in man 47

J. BUJANOWSKI-WEBER, I. KNÖLLER, B. BRINGS, T. PFEIL & W. KÖNIG: Detection and characterization of IgE-binding factors (IgE-BF) within supernatants of the cell line RPMI-8866, normal human sera and sera from atopic patients 53

P. B. ERNST, J. MAEBA, S.-I. LEE & F. PARASKEVAS: A novel mechanism for the selection of isotype-specific antibody responses: the role of intestinal T cells in the regulation of IgA synthesis by the anti-suppressor circuit 59

T. BABA, K. MASUMOTO, S. NISHIDA, T. KAJIKAWA & M. MITSUI: Harderian gland dependency of immunoglobulin A production in the lacrimal fluid of chicken 67

D. GRAY: Recruitment of virgin B cells into an immune response is restricted to activation outside lymphoid follicles 73

M. SALMON, G. D. KITAS, J. S. HILL GASTON & P. A. BACON: Interleukin-2 production and response to helper T-cell subsets in man 81

M. AWWAD & R. J. NORTH: Cyclophosphamide (Cy)-facilitated adoptive immunotherapy of a Cy-resistant tumour. Evidence that Cy permits the expression of adoptive T-cell mediated immunity by removing suppressor T cells rather than by reducing tumour burden 87

C. R. MACKAY, J. F. MADDOX, G. L. WIJFFELS, I. R. MACKAY & I. D. WALKER: Characterization of a 95,000 molecule on sheep leucocytes homologous to murine Pgp-1 and human CD44 93

B. SHARMA: Inhibition of the generation of cytotoxic lymphocytes by potassium ion channel blockers 101

A. M. M. MILTENBURG, M. E. MEIJER-PAAPE, M. R. DAHA & L. C. PAUL: Short-term lymphokine stimulation of human peripheral blood mononuclear cells generates cytolytic activity against endothelial cells: involvement of natural killer cells 107

P. D. MASON, A. P. WEETMAN, J. G. P. SISSONS & L. K. BORYSIEWICZ: Suppressive role of NK cells in pokeweed mitogen-induced immunoglobulin synthesis: effect of depletion/enrichment of Leu 11b$^+$ cells 113

D. W. HOROHOV, N. I. STOCKS & J. P. SIEGEL: Limiting-dilution analysis of human CTL differentiation. Requirement for a lymphokine-mediated differentiation signal 119

M. ROUABHIA, Z. GHANMI & P. A. DESCHAUX: Interaction between luteotrophic hormone (LH) and thymosin on natural killer cell activity in BALB/c mice 125

P. M. STARKEY, I. L. SARGENT & C. W. G. REDMAN: Cell populations in human early pregnancy decidua: characterization and isolation of large granular lymphocytes by flow cytometry 129

D. LANDRY, M. LAFONTAINE, M. COSSETTE, H. BARTHÉLÉMY, C. CHARTRAND, S. MONTPLAISIR & M. PELLETIER: Human thymic dendritic cells. Characterization, isolation and functional assays 135

C. OH, S. SUZUKI, I. NAKASHIMA, K. YAMASHITA & K. NAKANO: Histamine synthesis by non-mast cells through mitogen-dependent induction of histidine decarboxylase 143

Brief communications

G. Z. HASTINGS, D. S. BURT & D. R. STANWORTH: A monoclonal antibody raised against a synthetic peptide representative of part of the amino acid sequence of rat immunoglobulin E detects thermally induced changes in that region of the IgE molecule 149

J. WOO, M. STEPHEN & A. W. THOMSON: Spleen lymphocyte populations and expression of activation markers in rats treated with the potent new immunosuppressive agent FK-506 153

Book reviews 157

Vol. 65 No. 2 October 1988

E. WIENER, V. M. JOLLIFFE, H. C. F. SCOTT, B. M. KUMPEL, K. M. THOMPSON, M. D. MELAMED &

N. C. HUGHES-JONES: Differences between the activities of human monoclonal IgG1 and IgG3 anti-D antibodies of the Rh blood group system in their abilities to mediate effector functions of monocytes 159

N. ESSANI & M. FISHMAN: Induction of EL_4 cell resistance to syngeneic macrophage-mediated lysis by protein kinase *C* ligands: effects of cultured TPA-treated target cell and protein phosphorylation 165

Y. M. LUCISANO & B. MANTOVANI: The role of complement in the stimulation of lysosomal enzyme release by polymorphonuclear leucocytes induced by immune complexes of IgG and IgM 171

A. KUROIWA, K. IGISU, T. YANO, N. OKADA & H. OKADA: Fibronectin enhances respiratory burst of phagocytes stimulated by zymosan and immune complexes 177

M. J. JANUSZ, K. F. AUSTEN & J. K. CZOP: Phagocytosis of heat-killed blastospores of *Candida albicans* by human monocyte β-glucan receptors 181

K. C. MCCULLOUGH, D. PARKINSON & J. R. CROWTHER: Opsonization-enhanced phagocytosis of foot-and-mouth disease virus 187

T. S. HALSTENSEN, T. E. MOLLNES & P. BRANDTZAEG: Terminal complement complex (TCC) and S-protein (vitronectin) on follicular dendritic cells in human lymphoid tissues 193

D. M. HAIG, W. BLACKIE, J. HUNTLEY, A. MACKELLAR & W. D. SMITH: The generation of ovine bone marrow-derived mast cells in culture 199

D. MCK. HAIG, C. MCMENAMIN, J. REDMOND, D. BROWN, I. G. YOUNG, S. D. R. COHEN & A. J. HAPEL: Rat IL-3 stimulates the growth of rat mucosal mast cells in culture 205

L. K. GOFF, R. J. ARMITAGE & P. C. L. BEVERLEY: Characterization of two CD23 monoclonal antibodies with reactivity distinct from other antibodies within this cluster of differentiation 213

S. MURAKAMI, S. ONO, N. HARADA, Y. HARA, Y. KATOH, K. DOBASHI, K. TAKATSU & T. HAMAOKA: T-cell-derived factor B151-TRF1/IL-5 activates blastoid cells among unprimed B cells to induce a polyclonal differentiation into immunoglobulin M-secreting cells 221

J. ARVIEUX, H. YSSEL & M. G. COLOMB: Antigen-bound C3b and C4b enhance antigen-presenting cell function in activation of human T-cell clones 229

G. PERNEGGER, T. F. SCHULZ, M. HOSP, B. L. MYONES, A. L. PETZER, A. EIGENTLER, G. BÖCK, G. WICK & M. P. DIERICH: Cell cycle control of a Burkitt lymphoma cell line: responsiveness to growth signals engaging the C3D/EBV receptor 237

P. J. VAN DER HEIJDEN, A. T. J. BIANCHI, W. STOK & B. A. BOKHOUT: Background (spontaneous) immunoglobulin production in the murine small intestine as a function of age 243

D. W. MASON & S. J. SIMMONDS: The autonomy of $CD8^+$ T cells *in vitro* and *in vivo* 249

F. KOCH, A. KASHAN & H.-G. THIELE: The rat T-cell differentiation marker RT6.1 is more polymorphic than its alloantigenic counterpart RT6.2 259

M. D. PESCOVITZ, M. A. LOWMAN & D. H. SACHS: Expression of T-cell associated antigens by porcine natural killer cells 267

L. S. D. ANTHONY, R. F. L. JAMES, D. J. MAUDSLEY & P. A. L. KONGSHAVN: Inhibition of expression of cell-mediated immunity by a cell surface-binding antibody directed against T-cell helper factors 273

M. ČOLIĆ, D. MATANOVIĆ, L. HEGEDIŠ & A. DUJIĆ: Immunohistochemical characterization of rat thymic non-lymphoid cells. I. Epithelial and mesenchymal components defined by monoclonal antibodies 277

E. M. BOLTON, J. A. GRACIE, L. A. O'REILLY & J. A. BRADLEY: The cellular basis of the local graft-versus-host reaction in rat kidney 285

S. GRAHAM & C. J. SECOMBES: The production of a macrophage-activating factor from rainbow trout *Salmo gairdneri* leucocytes 293

E. FISCHER, M. A. OUAISSI, P. VELGE, J. CORNETTE & M. D. KAZATCHKINE: gp 58/68, a parasite component that contributes to the escape of the trypomastigote form of *T. cruzi* from damage by the human alternative complement pathway 299

R. HOLMDAHL, L. JANSSON, M. ANDERSSON & E. LARSSON: Immunogenetics of type II collagen autoimmunity and susceptibility to collagen arthritis 305

A. M. LEW, R. F. ANDERS, S. J. EDWARDS & C. J. LANGFORD: Comparison of antibody avidity and titre elicited by peptide as a protein conjugate or as expressed in vaccinia 311

Brief communications

E. SHAHUM & H.-M. THÉRIEN: Immunopotentiation of the humoral response by liposomes: encapsulation versus covalent linkage 315

T. O. NASHAR, C. R. STOKES, P. J. CRIPPS & F. J. BOURNE: The humoral response of mice to intra-mammary immunization with ovalbumin 319

R. LANDSBERG, M. FALLON & R. INSEL: Alteration in helper-inducer and suppressor-inducer T-cell subsets in human neonatal blood 323

Book reviews 327

Vol. 65 No. 3 November 1988

Review paper

V. S. BYERS & R. W. BALDWIN: Therapeutic strategies with monoclonal antibodies and immunoconjugates 329

T. TAMATANI, H. TSUNODA, H. IWASAKI, M. KANEKO, T. HASHIMOTO & K. ONOZAKI: Existence of both IL-1α and β in normal human amniotic fluid: unique high molecular weight form of IL-1 337

D. A. CANTRELL, M. K. L. COLLINS & M. J. CRUMPTON: Autocrine regulation of T-lymphocyte proliferation: differential induction of IL-2 and IL-2 receptor 343

D. KELLEHER, S. J. PANDOL & M. F. KAGNOFF: Phorbol myristate acetate induces IL-2 secretion by HUT 78 cells by a mechanism independent of protein kinase *C* translocation 351

D. HABETSWALLNER, E. PELOSI, D. BULGARINI, A. CAMAGNA, P. SAMOGGIA, E. MONTESORO, G. GIANNELLA, D. LAZZARO, G. ISACCHI, U. TESTA & C.

PESCHLE: Activation and proliferation of normal resting human T lymphocytes in serum-free culture: role of IL-4 and IL-6 357
K. H. G. MILLS: Inhibitory effects of monoclonal antibodies to a synthetic peptide of influenza haemagglutinin on the processing and presentation of viral antigens to class II-restricted T-cell clones 365
I. BECKMAN, X. XIAONING & J. BRADLEY: Specific inhibition of OKT3-driven T-cell mitogenesis by an anti-HLA class I monoclonal antibody 373
R. E. CALLARD, Y. L. LAU, J. G. SHIELDS, S. H. SMITH, J. CAIRNS, L. FLORES-ROMO & J. GORDON: The marmoset B-lymphoblastoid cell line (B95-8) produces and responds to B-cell growth and differentiation factors: role of shed CD23 (sCD23) 379
D. ABRAHAM, H. MUIR & I. OLSEN: Adhesion of T and B lymphocytes to fibroblasts in tissue culture 385
S. MCCLURE, L. DUDLER, D. THORPE & W. R. HEIN: Analysis of cell division among subpopulations of lymphoid cells in sheep. I. Thymocytes 393
S. MCCLURE, L. DUDLER, D. THORPE & W. R. HEIN: Analysis of cell division among subpopulations of lymphoid cells in sheep. II. Peripheral lymphocytes 401
O. BAGASRA, A. HOWEEDY & A. KAJDACSY-BALLA: Macrophage function in chronic experimental alcoholism. I. Modulation of surface receptors and phagocytosis 405
C. K. ABRASS: Measurement of the rates of basal pinocytosis of horseradish peroxidase and internalization of heat-aggregated IgG by macrophages from normal and streptozotocin-induced diabetic rats 411
N. BILYK, J. S. MACKENZIE, J. M. PAPADIMITRIOU & P. G. HOLT: Functional studies on macrophage population in the airways and the lung wall of SPF mice in the steady-state and during respiratory virus infection 417
T. HANDA, M. MITSUYAMA, B. AKE SERUSHAGO, K. MURAMORI & N. NOMOTO: Co-operative effect of MCF and MAF(IFN-γ) in the protection of mice against *Listeria monocytogenes* 427
C. OH & K. NAKANO: Inhibition by glucocorticoids of mitogen-dependent histamine biosynthesis caused by histidine decarboxylase in cultured mouse spleen cells and peritoneal adherent cells 433
P. H. REES, K. HILLIER & M. K. CHURCH: The secretory characteristics of mast cells isolated from the human large intestinal mucosa and muscle 437
J. J. PRUZANSKY & R. PATTERSON: Desensitization of human basophils with suboptimal concentrations of agonist. Evidence for reversible and irreversible desensitization 443
J.-J. TSAI, P. MAESTRELLI, O. CROMWELL, R. MOQBEL, P. FITZHARRIS & A. B. KAY: A T-lymphocyte-derived factor that enhances IgG-dependent release of leukotriene B_4 (LTB_4) from human neutrophils 449
K. MOORE, M. T. WALTERS, D. B. JONES, E. GARVEY, J. HARVEY, M. I. D. CAWLEY & J. L. SMITH: An immunohistological study of $CD4^+$ lymphocyte subsets within inflammatory lesions with special reference to rheumatoid arthritis and inflammatory bowel disease 457
E. P. VAN REES, H. A. M. VOORBIJ & C. D. DIJKSTRA: Neonatal development of lymphoid organs and specific immune responses *in situ* in diabetes-prone BB rats 465
E. W. SHORES, D. S. PISETSKY, J. GRUDIER, R. A. EISENBERG & P. L. COHEN: Immunization with the Sm nuclear antigen induces anti-Sm antibodies in normal and MRL mice 473
E. BEN-CHETRIT, D. EILAT & S. A. BEN-SASSON: Specific inhibition of the DNA–anti-DNA immune reaction by low molecular weight anionic compounds 479
J. A. APPLETON, L. R. SCHAIN & D. D. MCGREGOR: Rapid expulsion of *Trichinella spiralis* in suckling rats: mediation by monoclonal antibodies 487

Brief communication

J. GORDON, G. R. GUY & M. J. MILLSUM: Mitogenic stimulation of human B lymphocytes via the inositol phospholipid 'dual pathway' of signalling requires persistent activation of both second messenger arms 493

Announcements 495

Vol. 65 No. 4 December 1988

Review paper

F. CARSWELL: State of the art: mites and human allergy 497

G. E. GRAU, P.-F. PIGUET, D. GRETENER, C. VESIN & P.-H. LAMBERT: Immunopathology of thrombocytopenia in experimental malaria 501
M. J. DOENHOFF, J. MODHA & J. R. LAMBERTUCCI: Anti-schistosome chemotherapy enhanced by antibodies specific for a parasite esterase 507
A. COOPER, H. ROSEN & J. M. BLACKWELL: Monoclonal antibodies that recognize distinct epitopes of the macrophage type three complement receptor differ in their ability to inhibit binding of *Leishmania* promastigotes harvested at different phases of their growth cycle 511
P. R. CROCKER, M. HILL & S. GORDON: Regulation of a murine macrophage haemagglutinin (sheep erythrocyte receptor) by a species-restricted serum factor 515
G. KRAAL, R. SHIAMATEY-KOOLMA, M. HOFFER, D. BAKER & R. SCHEPER: Histochemical identification of guinea-pig macrophages by monoclonal antibody MR-1 523
W. SCHÖNFELD, B. SCHLÜTER, R. HILGER & W. KÖNIG: Leukotriene generation and metabolism in isolated human lung macrophages 529
S. S. MORSE & P. B. MOORE: Expression of 67,000 MW calcimedin and its binding protein in resident and thioglycolate-elicited macrophages 537
V. R. MAHIDA, K. C. WU & D. P. JEWELL: Characterization of antigen-presenting activity of intestinal mononuclear cells isolated from normal and inflammatory bowel disease colon and ileum 543
J. W. PAUL, K. W. KOTZ & J. K. ROCHE: Sensitization to epithelial antigens in chronic mucosal inflammatory disease: immunochemical similarity of macromolecules in human colonic epithelium with murine intestinal epithelial cell-associated components (ECAC) 551
H. R. P. MILLER, J. F. HUNTLEY, G. F. J. NEWLANDS, A. MACKELLAR, D. A. LAMMAS & D. WAKELIN: Granule proteinases define mast cell heterogeneity in the serosa and the gastrointestinal mucosa of the mouse 559

M. L. Watson, G. P. Lewis & J. Westwick: Neutrophil stimulation by recombinant cytokines and a factor produced by IL-1-treated human synovial cell cultures 567

A. L. Davis, J. L. McKenzie & D. M. J. Hart: HLA-DR-positive leucocyte subpopulations in human skin include dendritic cells, macrophages, and CD7-negative T cells 573

B. W. McBride, J. I. McGill & J. L. Smith: MHC class I and class II antigen expression in normal human corneas and in corneas from cases of herpetic keratitis 583

S.-I. Kashiwamura, Y. Sadakane, H. Kikutani, T. Kishimoto & M. Kimoto: Quantitative analysis of integrated E_3^d gene expression in C57BL/6 transgenic mice 589

S. E. Christmas & M. Moore: T-cell receptor β gene rearrangements in clones derived from human $CD4^-8^-$ cells expressing natural killer cell activity 597

P. Maestrelli, R. E. O'Hehir, J. R. Lamb, J.-J. Tsai, O. Cromwell & A. B. Kay: Antigen-induced neutrophil chemotactic factor from cloned human T lymphocytes 605

K. L. Bost, B. H. Hahn, M. S. Saag, G. M. Shaw, D. A. Weigent & J. E. Blalock: Individuals infected with HIV possess antibodies against IL-2 611

M. Larche, J. R. Lamb, R. E. O'Hehir, N. Imami-Shita, E. D. Zanders, D. E. Quint, R. Moqbel & M. A. Ritter: Functional evidence for a monoclonal antibody that binds to the human IL-4 receptor 617

D. M. Chassoux, L. G. Linares-Cruz, H. Bazin & M. Stanislawski: K-cell-mediated cytotoxicity induced with rat monoclonal antibodies. I. Antibodies of various isotypes differ in their ability to induce cytotoxicity mediated by rat and human effectors 623

R. E. Taffs & S. J. Ewald: Effect of Ly 5 allotype on *in vitro* immune responses 629

R. Rabinowitz, R. Hadar & M. Schlesinger: Idiotype regulation of thymus autoantibodies 635

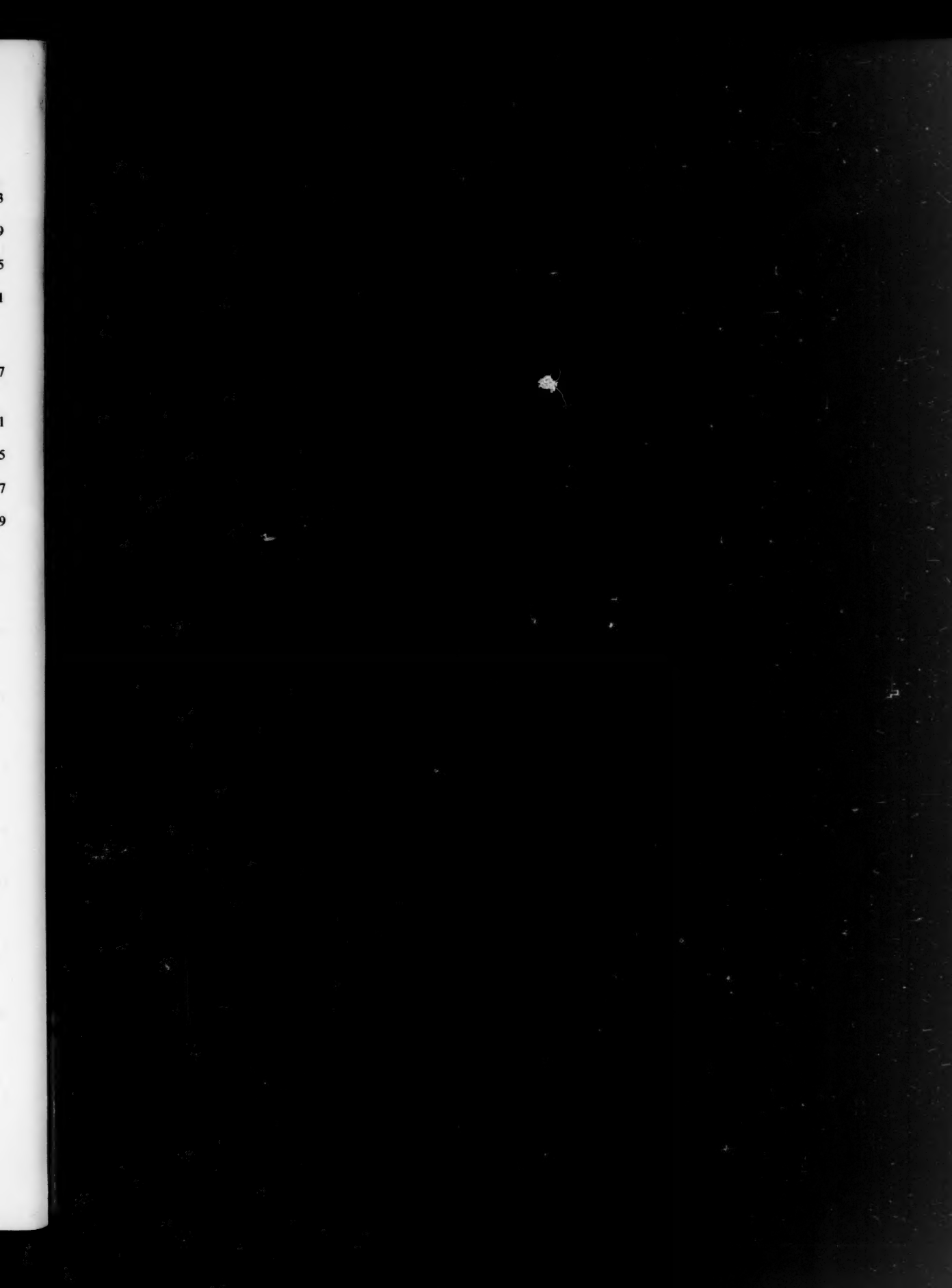
V. Coosemans & I. Hadji-Azimi: Immunoglobulin Fc receptor molecules on *Xenopus laevis* splenocytes 641

Brief communications

J. Brom, J. Knöller, M. Köller & W. König: Tumour necrosis factors modulate the affinity state of the leukotriene B_4 receptor on human neutrophils 647

A. Pirelli, P. Allavena & A. Mantovani: Activated adherent large granular lymphocytes/natural killer (LGL/NK) cells change their migratory behaviour 651

Book reviews 655

Editorial acknowledgment 657

Author and subject indexes for Volume 65 659